

Annual



Report

**RIDOT TMC Incident Statistics
1/1/2010 To 12/31/2010**

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is done quarterly. By making these statistics available to you, we hope that you can learn more about the program and understand the benefit of the services we provide to the Rhode Island motoring public.

The types of incidents tabulated in this annual summary include disabled vehicles, debris on the roadway, emergency roadwork, vehicle accidents, and vehicle rollovers. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (<http://www.tmc.state.ri.us>), including construction and incident information.

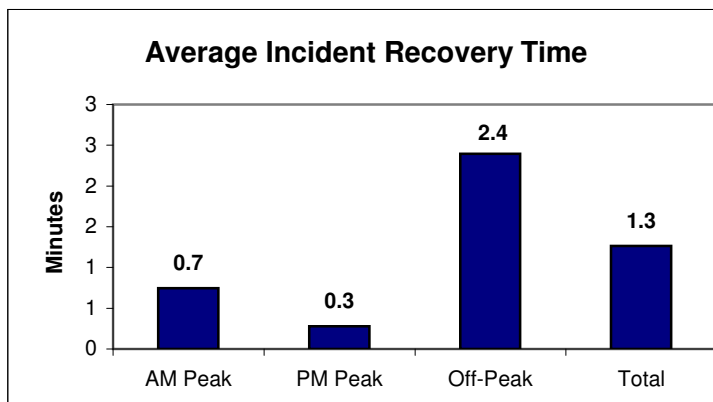
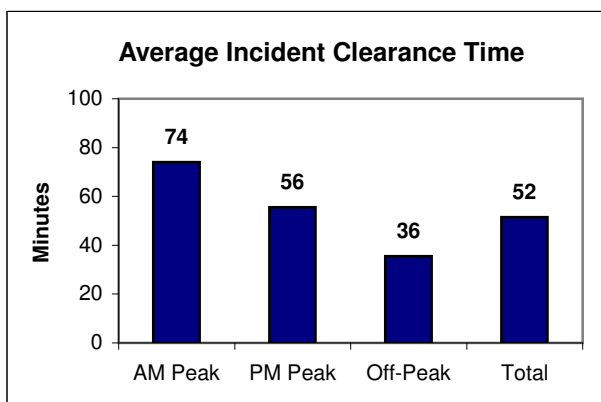
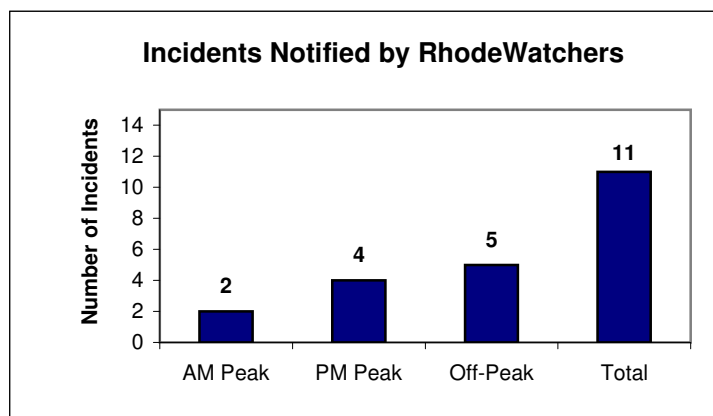
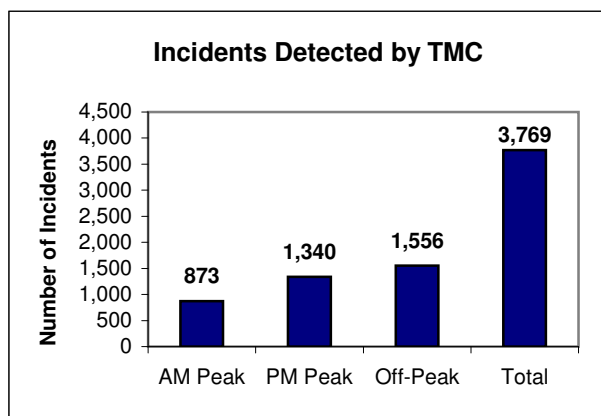
RIDOT TMC Incident Statistics Report

1. Peak Period Incident Statistics*

	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	908	1380	1622	3910
Avg. Incident Duration (min)	75	56	38	53
Avg. Incident Clearance Time (min)	74	56	36	52
Avg. Incident Recovery Time (min)	1	0	2	1
# Detected by TMC Operators (CCVE)	425	527	555	1507
# Detected by TMC, State Police	448	813	1001	2262
# Notified by RhodeWatchers	2	4	5	11
# of Messages Posted VMS	61	115	165	341
# of Messages Posted DMS	236	469	574	1279
# of Messages Posted HAR	195	254	283	732
# of Messages posted Web	816	1308	1427	3551
Avg. Delay Cost**	\$316,519	\$236,481	\$160,307	\$223,468
Total Delay Cost	\$287,398,813	\$326,344,382	\$260,017,962	\$873,761,157

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

** Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.



Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways

Incident Clearance Time is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

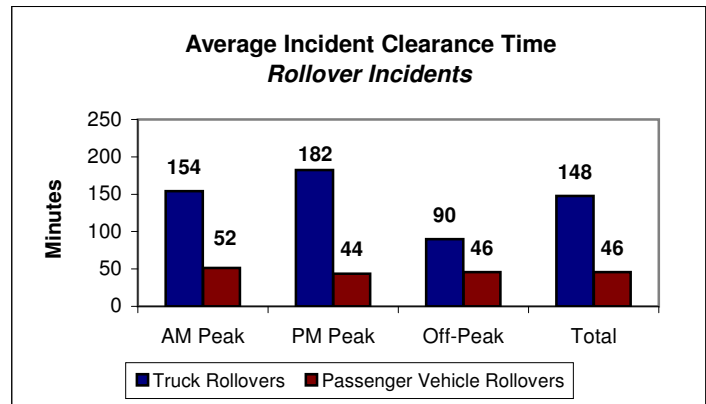
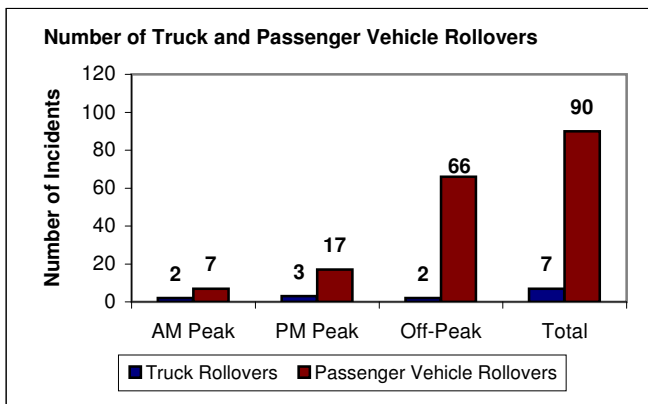
Incident Recovery Time is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.

2. Rollover Incident Statistics*

2000

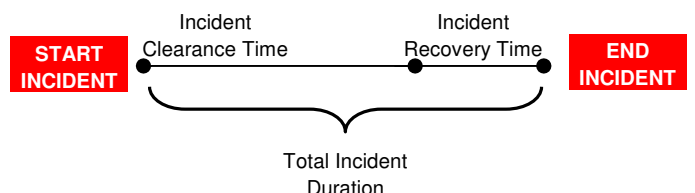
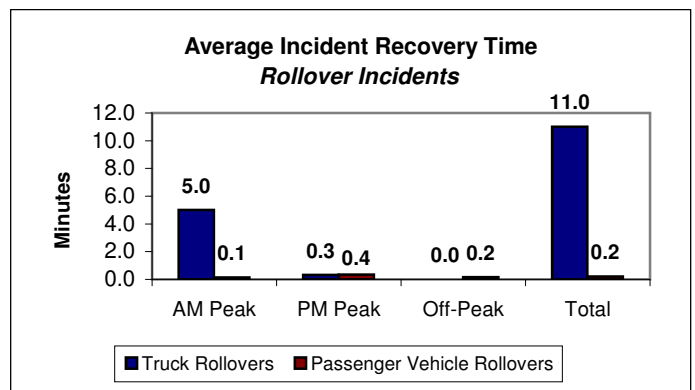
VEHICLES	Trucks				Automobiles			
	AM Peak	PM Peak	Off-Peak	Total	AM Peak	PM Peak	Off-Peak	Total
No. of Rollovers	2	3	2	7	7	17	66	90
Avg. Incident Duration (min)	159	183	90	149	52	44	46	46
Avg. Incident Clearance Time (min)	154	182	90	148	52	44	46	46
Avg. Incident Recovery Time (min)	5	0	0	11	0	0	0	0

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday



Roadway	Exit Number	Number Of Rollovers
Airport Connector Westbound	N/A	1
Interstate 195 Eastbound	3	1
Interstate 195 Eastbound	7	1
Interstate 195 Westbound	3	1
Interstate 195 Westbound	N/A	1
Interstate 295 Northbound	8A	2
Interstate 295 Northbound	6	3
Interstate 295 Southbound	10	2
Interstate 295 Southbound	3A	1
Interstate 295 Southbound	4	1
Interstate 295 Southbound	7B	1
Interstate 295 Southbound	7A	2
Interstate 295 Southbound	9B	1
Interstate 95 Northbound	2	2
Interstate 95 Northbound	7	1
Interstate 95 Northbound	24	2
Interstate 95 Northbound	15	3
Interstate 95 Northbound	18	4
Interstate 95 Northbound	8A	1
Interstate 95 Northbound	12	1
Interstate 95 Northbound	5A	1
Interstate 95 Northbound	23	2
Interstate 95 Northbound	22A	2

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<i>Interstate 95 Northbound</i>	16	1
<i>Interstate 95 Northbound</i>	27	2
<i>Interstate 95 Northbound</i>	26	1
<i>Interstate 95 Northbound</i>	14B	1
<i>Interstate 95 Northbound</i>	19	1
<i>Interstate 95 Southbound</i>	18	4
<i>Interstate 95 Southbound</i>	N/A	3
<i>Interstate 95 Southbound</i>	4	2
<i>Interstate 95 Southbound</i>	15	3
<i>Interstate 95 Southbound</i>	16	1
<i>Interstate 95 Southbound</i>	10B	1
<i>Interstate 95 Southbound</i>	9	1
<i>Interstate 95 Southbound</i>	6A	3
<i>Interstate 95 Southbound</i>	5A	2
<i>Interstate 95 Southbound</i>	10A	2
<i>Interstate 95 Southbound</i>	25	2
<i>Interstate 95 Southbound</i>	22B	1
<i>Interstate 95 Southbound</i>	5B	1
<i>Interstate 95 Southbound</i>	12A	1
<i>Interstate 95 Southbound</i>	2	1
<i>Other Northbound</i>	N/A	1
<i>Route 10 Northbound</i>	N/A	4
<i>Route 10 Southbound</i>	N/A	3
<i>Route 102 Westbound</i>	N/A	1
<i>Route 138 Westbound</i>	N/A	2
<i>Route 146 Northbound</i>	N/A	2
<i>Route 146 Southbound</i>	N/A	2
<i>Route 2 Northbound</i>	N/A	1
<i>Route 37 Westbound</i>	4B	1
<i>Route 37 Westbound</i>	1B	1
<i>Route 4 Northbound</i>	6	1
<i>Route 4 Southbound</i>	8	1
<i>Route 4 Southbound</i>	6	1
<i>Route 403 Northbound</i>	N/A	1
<i>Route 6 Eastbound</i>	N/A	2
<i>Route 7 Southbound</i>	N/A	1
<i>Route 78 Eastbound</i>	4	1
TOTAL		97

3. Incidents by Severity Level

Severity Level*	No. of Incidents
Severity 0	1693
Severity 1	646
Severity 2	343
Severity 3	204
Severity 4	204
Unknown	820
Total	3910

Number of Incidents with a Secondary

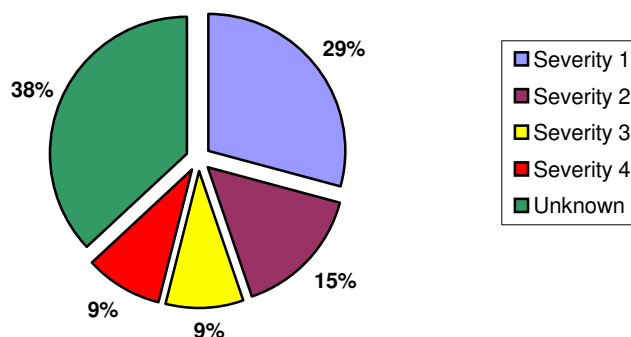
Incident:

Percentage of Incidents with a Secondary

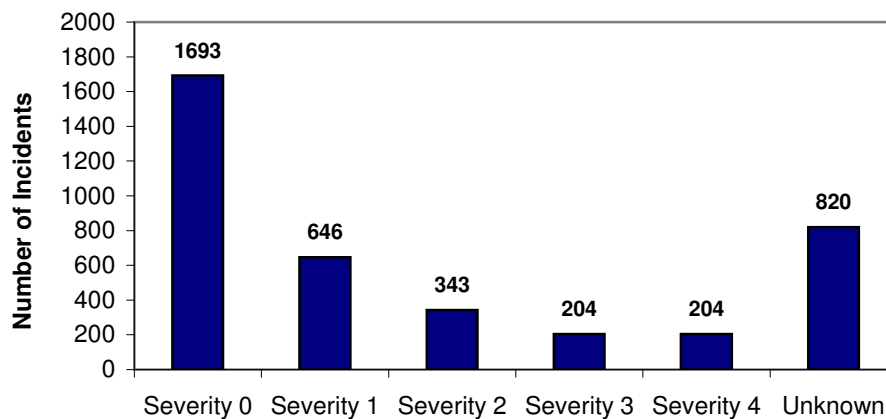
Incident:

Note: A "secondary" incident is one that is the result of an earlier incident.

Percent of Incidents by Severity Level



Number of Incidents by Severity Level



*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR hazardous materials (HAZMAT) w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed

OR Structural damage w/ 1/3, 2/3+ lanes closed

Unknown: Incidents without a recorded severity level

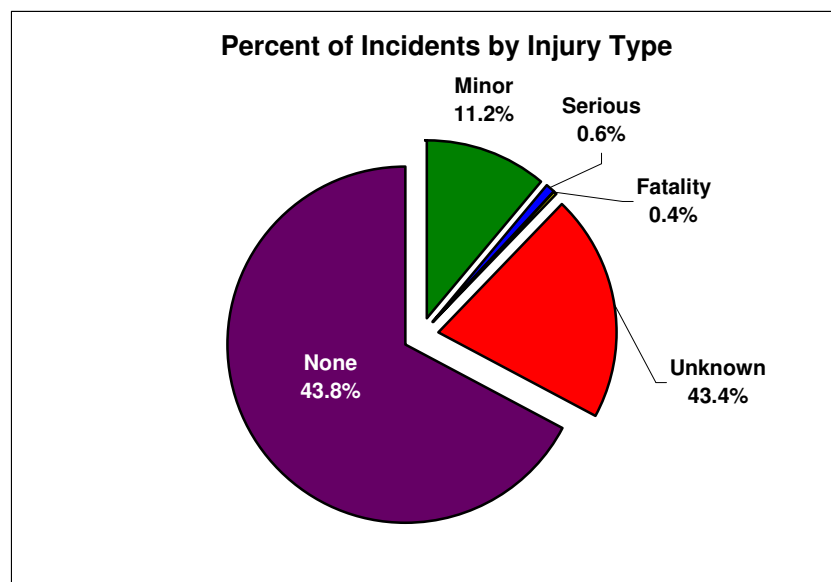
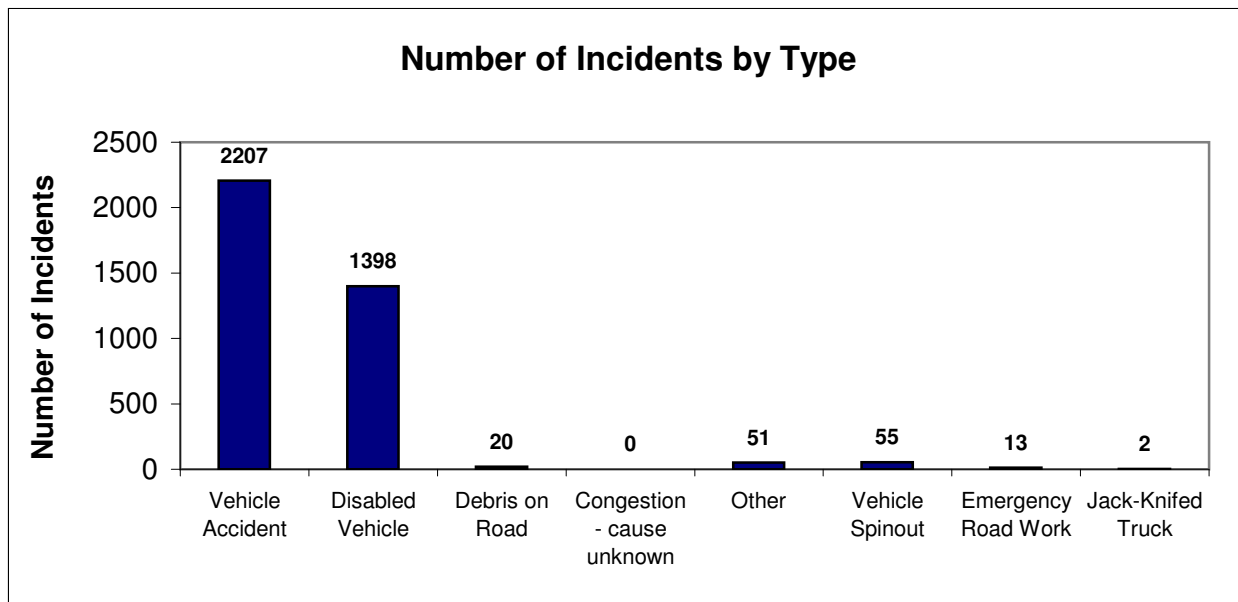
Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	2207
Disabled Vehicle	1398
Debris on Road	20
Congestion - cause unknown	0
Other	51
Vehicle Spinout	55
Emergency Road Work	13
Jack-Knifed Truck	2
<i>Total Number of Incidents</i>	<i>3746</i>

5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	438
Serious	25
Fatality	14
Unknown	804
None	2629
<i>Total</i>	<i>3910</i>



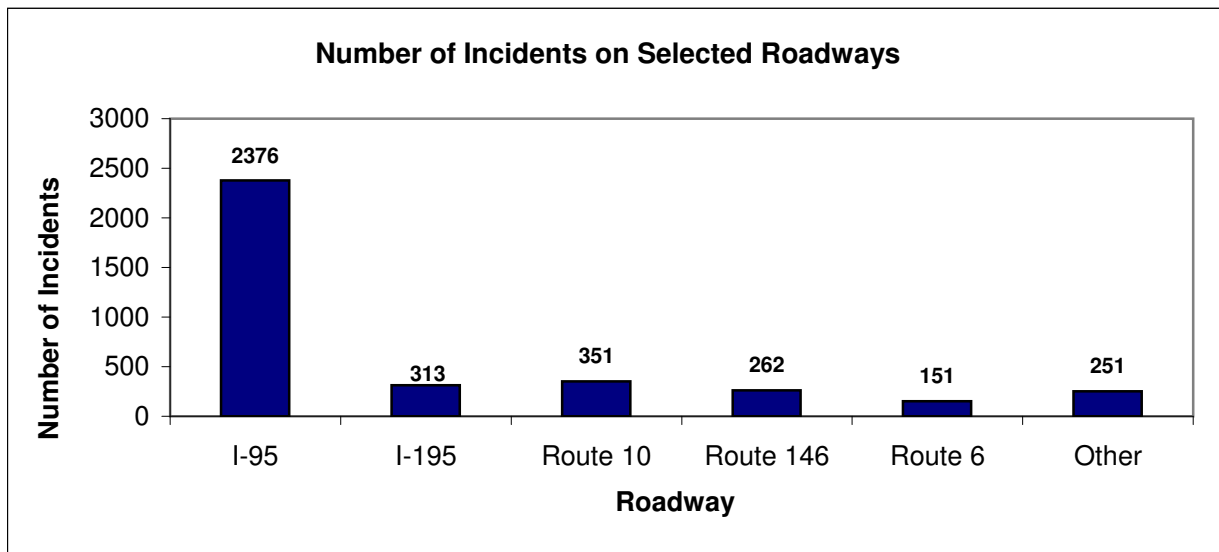
6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	2970
Wet	826
Icy	42
Snow-Covered	67
Flooded	5
Other	0
<i>Total</i>	<i>3910</i>
Precipitation	
None	3182
Light-moderate rain falling	515
Heavy rain falling	108
Light-moderate sleet falling	4
Heavy sleet falling	3
Light-moderate snow falling	86
Heavy snow falling	12
<i>Total</i>	<i>3910</i>
Wind	
Calm to Moderate	3739
Moderate to Strong	164
Gusts over 50 mph	1
Gusts over 75 mph	0
Hurricane	0
Other	1
N/A	5
<i>Total</i>	<i>3910</i>
Visibility	
Clear	3300
Light fog	62
Dense fog	14
Reduced- rain	423
Reduced-snow	86
Poor-heavy rain/sleet	13
Poor-heavy snow	7
Reduced-smoke	0
Other	3
N/A	2
<i>Total</i>	<i>3910</i>

7. Incidents Detected by Primary Notifier on Selected Roadways

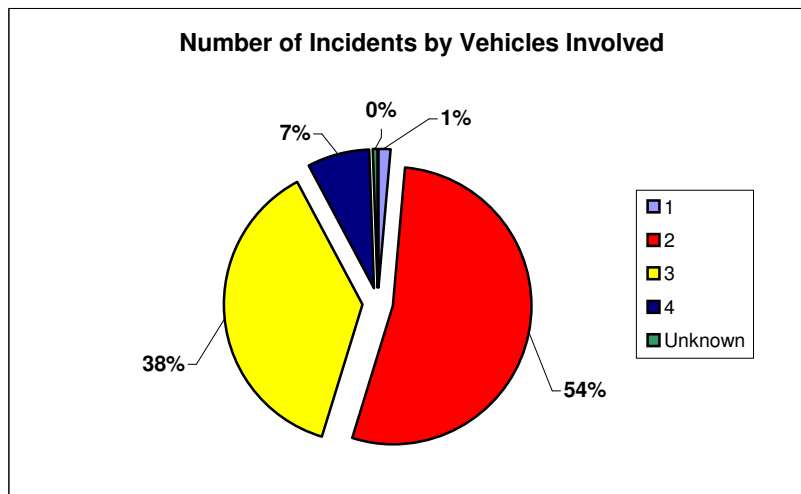
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	133
	State Police Scanner	140
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	40
	Total	313
I-95	TMC Operator	1046
	State Police Scanner	1038
	Local Fire Department	0
	Rhode Watcher	6
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	2
	Other	284
	Total	2376
I-295	TMC Operator	27
	State Police Scanner	134
	Local Fire Department	1
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	1
	Other	42
	Total	206

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	131
	State Police Scanner	179
	Local Fire Department	0
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	40
	Total	351
Route 146	TMC Operator	76
	State Police Scanner	135
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	51
	Total	262
Route 6	TMC Operator	59
	State Police Scanner	59
	Local Fire Department	2
	Rhode Watcher	2
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	29
	Total	151



8. Incidents by Number of Vehicles Involved

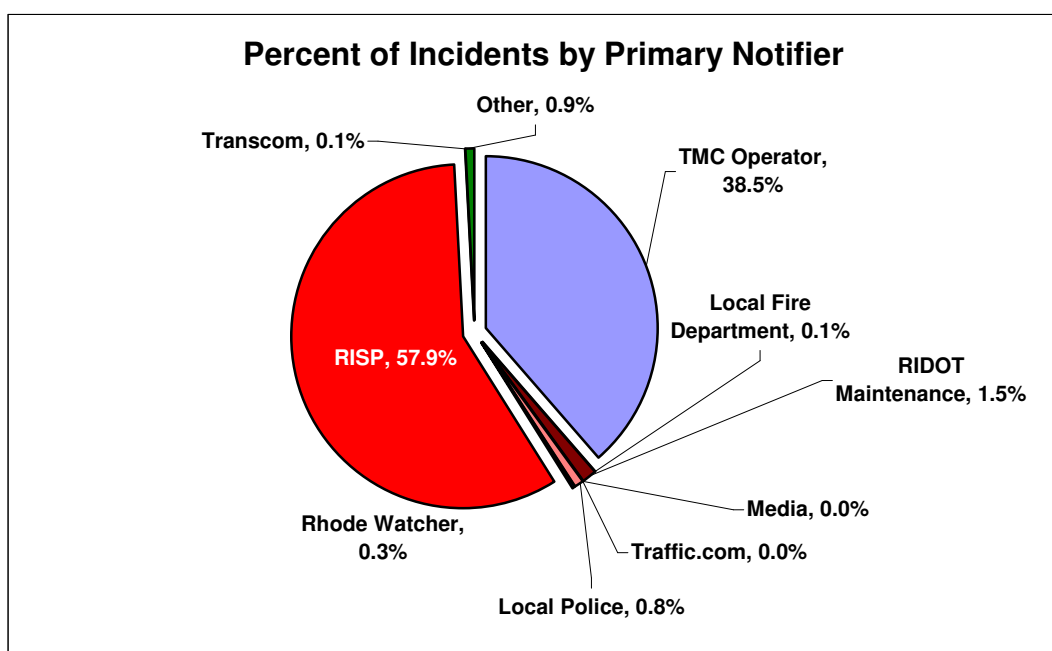
No. of Vehicles Involved	No. of Incidents
1	52
2	2038
3	1441
4	279
5	58
6	17
7	5
8	0
9	0
10+	2
Unknown	18
Total Incidents	3910

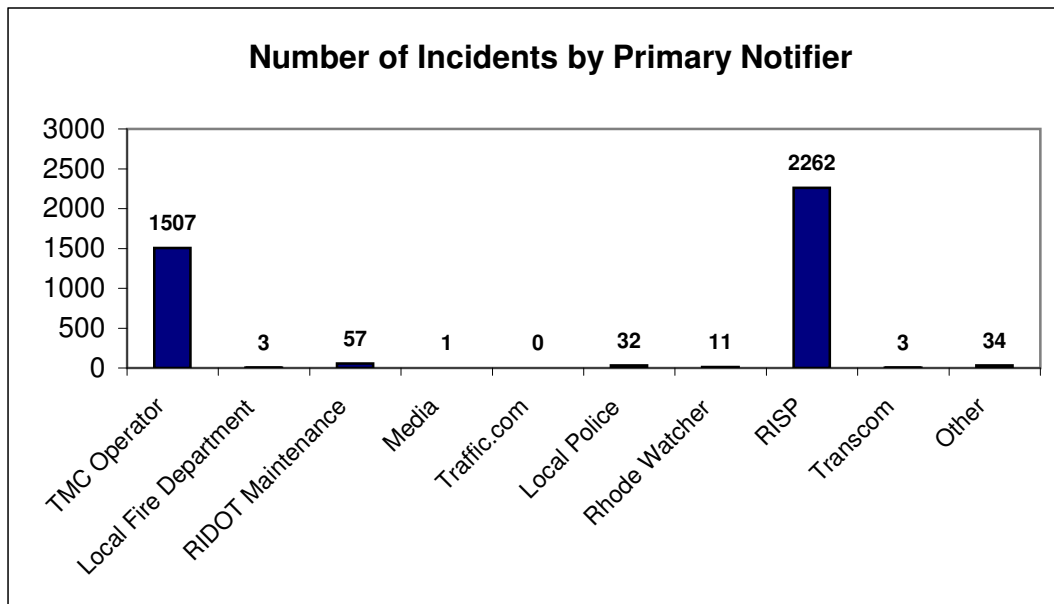


9. Incident Notification

Primary Notifier*	No. of Incidents
TMC Operator	1507
Local Fire Department	3
RIDOT Maintenance	57
Media	1
Traffic.com	0
Local Police	32
Rhode Watcher	11
RISP	2262
Transcom	3
Other	34
Total	3910

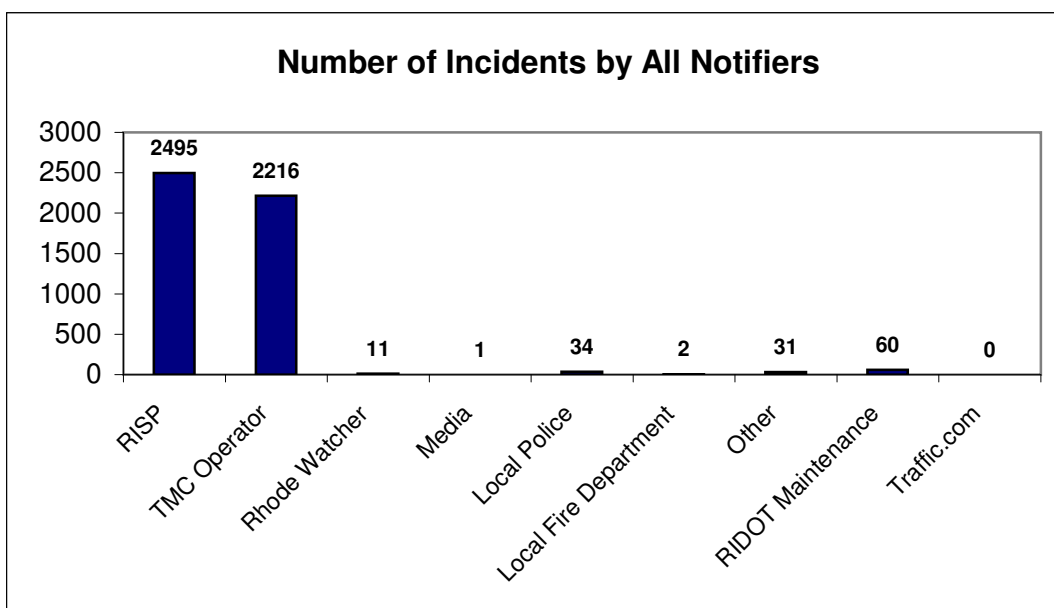
*First notifier of the incident to TMC





Notifier	No. of Incidents
RISP	2495
TMC Operator	2216
Rhode Watcher	11
Media	1
Local Police	34
Local Fire Department	2
Other	31
RIDOT Maintenance	60
Traffic.com	0
Transcom	3

Note: Primary notifier indicates the first notifier of the incident to the TMC. Additional notifiers are also logged, and are represented in the statistics for "all notifiers".



10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	3154	80.66%
Tow	1304	33.35%
Local Fire Department	755	19.31%
EMS	731	18.70%
Local Police	208	5.32%
Service Patrol	78	1.99%
Mass Highway	3	0.08%
DOT	57	1.46%
Hazmat	3	0.08%
DEM	5	0.13%
Connecticut DOT	0	0.00%
Construction	3	0.08%
Coast Guard	0	0.00%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	1	0.03%

	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	1514
# of VMS Messages	341
# of DMS Messages	1279
# of HAR Messages	732
# of Web Messages	3551

Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.

